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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/796,240

03/09/2004

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EXAMINER

MAPLES, JOHN S

ART UNIT

PAPER NUMBER

1795

MAIL DATE

DELIVERY MODE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/796,240	<b>Applicant(s)</b> HATTA ET AL.
	<b>Examiner</b> John S. Maples	<b>Art Unit</b> 1795

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 28 October 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 11-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 11-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

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1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 11-19 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claims contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention.

In the last line of claim 11, applicant has claimed “the thermoplastic layer has a width of 50 microns or less”. There is no support for this limitation in the originally filed specification. It is noted that applicant has determined an orientation of the battery in claim 11 in view the language therein reciting the width of the sealing portion given in line 4 of claim 11.

Claims 12-19, dependent on claim 11, fall therewith.

Applicant's arguments have all been considered but are not deemed persuasive. Applicant argues that page 15, lines 20-21 and page 16, lines 20-21 of the present specification provide support for the above claimed subject matter. The examiner respectfully disagrees. First of all, page 15, lines 20-21 do not recite any information regarding the thermoplastic layer or the thickness thereof. Secondly, page 16, lines 20-21 set forth a **thickness** of the thermoplastic layer, but not the width of the said layer. (boldness added) Therefore, applicant has not provided support where this claimed subject matter is found in the originally filed specification.

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3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 11-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. (New Rejection)

Line 12 of claim 11 sets forth a "resin piece". Lines 15-17 set forth multiple resin pieces, however, applicant has used the term "resin piece" to describe the multiple resin pieces. This renders the claim unclear and indefinite.

Claims 12-19, dependent on claim 11, fall therewith.

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 11-13 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP-2001-176466 ('466) in view of Fukuda et al.-US 6,001,505. (Fukuda) (New Rejection)

Reference is made to the Abstract in '466 which discloses a lithium polymer battery which inherently includes a battery element including an anode, a cathode and an electrolyte. The battery in '466 comprises a housing including the layers as claimed by applicant-see paragraph 31 and numbers 6-8 which teach the specific layers. These specific examples in '466 teach a case comprising: a second resin layer/adhesive (thermoplastic layer)/metal layer/adhesive/a first resin layer-a modified polypropylene resin layer. It is noted that paragraph 29 in '466 recites the modified polypropylene with a maleic anhydride which would result in the claimed carbonyl group. As set forth in paragraphs 53 and 55, the adhesive (thermoplastic) layer is 3 microns in thickness which meets the claimed thickness. Finally, '466 sets forth in Figures 5 and 6 and paragraphs 47-48, a sealing edge portion of the case that is between 1 and 3 mm. The depth of the tray in '466 is about 3-5 mm which is about the same size as the edge sealing portion as seen in Figure 6.

The only claimed elements not taught by '466 are the resin pieces disposed, respectively, between the casing and the cathode terminal and between the casing and the anode terminal. Fukuda teaches resin pieces 16a and 16b as seen in Figures 1-3 of Fukuda and taught in column 2, lines 51-63 and in column 4, lines 4-17; which pieces are located, respectively, between the casing and the cathode terminal and between the casing and the anode terminal. To have incorporated the resin pieces of Fukuda in the

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battery of '466 would have been obvious to one of ordinary skill in this art at the time the invention was made because the same would prevent air from entering inside the battery bag via openings near the battery terminals.

Applicant's arguments have all been considered but are deemed moot in view of the above new grounds of rejection.

8. Claims 14-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over '466 taken in view of both Fukuda and Eschbach et al.-US 5,631,103. (Eschbach) (New Rejection)

The only claimed features not specifically taught by '466 and Fukuda are the width of the edge sealing portion and for the particular elements of the battery element. To have formed the width of the edge sealing portion in '466/Fukuda of a distance of 1mm to less than 3mm would have been obvious because the same would allow for a secure between the layers to form a tight seal but still allow the battery to be used in a compact environment. Eschbach teaches a lithium polymer including a gel electrolyte, a carbon anode and a cathode comprising a lithiated complex of a transition metal in column 2, lines 35-67. To include the above teaching of Eschbach in '466/Fukuda would have been obvious because '466 is directed to the same type of battery and the same is no more than a straightforward substitution in the lithium polymer battery art producing a battery of high output.

Again, applicant's arguments have all been considered but are deemed moot in view of the above new grounds of rejection.

9. Applicant's amendment necessitated the new grounds of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John S. Maples whose telephone number is 571-272-1287. The examiner can normally be reached on Monday-Friday, 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan can be reached on 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/John S. Maples/

John S. Maples  
Primary Examiner  
Art Unit 1795

JSM/1-31-2009